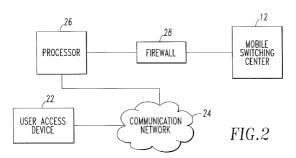
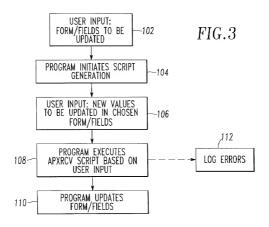
FIG.1





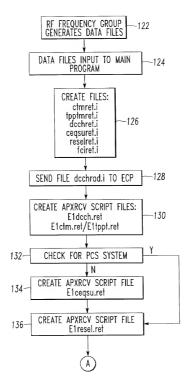
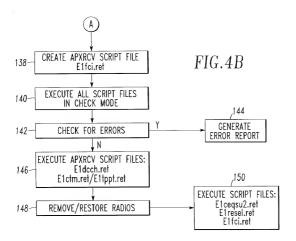


FIG.4A



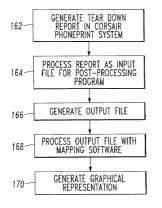
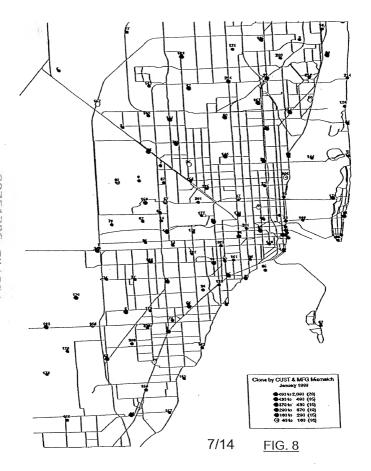


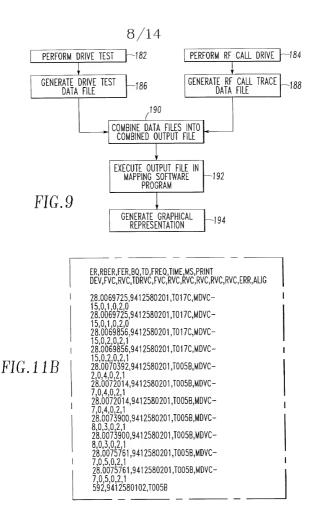
FIG.5

>pg pp9912	!.txt			
Date Tim	e(2) Site_ID MIN	(1) Dialed_Digits	Tear-Down_Reason	ı
12/25/99	19:26:09 2	0 2012075854	12014981322	MFG
12/23/99		19 2012075854	5617767114	MFG
12/26/99		67 2012130072	19547814445	MFG
12/23/99	19:06:49 8		9544289147	MFG
12/23/99 12/25/99	19:06:23 8 17:23:55 8		9544289147	MFG
12/25/99	15:06:20 8		9544285083 2015680907	MFG MFG
12/25/99	13:04:16 8		2015680907	MFG
12/25/99	13:04:05 8		2015680907	MFG
12/25/99	13:03:53 8		2015680907	MFG
12/25/99	13:03:31 8		2015680907	MFG
12/25/99	13:01:49 8		2015680907	MFG
12/25/99	12:53:38 8		2015680907	MFG
12/25/99	12:52:32 8		2015680907	MFG
12/25/99	12:52:03 8 12:50:48 8		2015680907	MFG
12/25/99 12/25/99	12:50:48 8 12:48:15 8		2015680907 2015680907	MFG
12/25/99	12:47:16 8		5680907 MFG	MFG
12/24/99	11:58:50 8		8003328463	MFG
12/24/99	11:58:08 8		8003328463	MFG
12/24/99	10:03:16 8		9544289147	MFG
12/22/99	14:58:09 8		19546467166	MFG
12/29/99		77 2012499657	19086881800	MFG
12/29/99		77 2012499657	9412503698	MFG
12/29/99 12/29/99		45 2012499657 45 2012499657	12012400657	MFG
12/29/99		45 2012499657 9 2012476225	12012400657 15616551115	MFG
12/24/99		19 2012476225	15615551212	MFG MFG
12/24/99		19 2012476225	15615551212	MFG
12/24/99		19 2012476225	15615551212	MFG
12/24/99	19:13:38 2	19 2012476225	5617950022	MFG
12/27/99	12:01:06 2		15614996976	MFG
12/23/99		2 2012640686	3105152822	MFG
12/23/99		2 2012640686	3105152822	MFG
12/23/99	16:17:03 1	2 2012640686	3105152822	MFG

FIG.6

```
>pg map1299
ECP, CellNo,Longitude, Latitude,Count
4,1,-80.1675,26.155278.148
3,5,-80.361111,25.699444,209
1,6,-80.171667,26.36,675
1,7,-80.144167,26.562778,173
1,8,-80.109722,26.760556,76
3,9,-80.317222,25.679444,311
3,10,-80.266667,25.747222,115
4,15,-80.123056,25.854167,510
4,16,-80.198611,26.248889,401
1.18.-80.088889.26.45.380
1,20,-80.058611,26.651944,216
4,22,-80.210833,25.848611,138
4,23,-80.128889,26.085833,844
4,25,-80.288889,25.845556,55
1.26.-80.201111.26.630833.251
4,27,-80.204722,25.93,590
3,38,-80.360833,25.596667,255
3,39,-80,333889,25.649444,584
4,30,-80.415,26.086389,207
4,31,-80.175833,26.121944,128
 1,37,-80.681389,26.686667,213
4,40,-80.364444,25.828333,156
4,42,-80.286944,25.920556,147
 4,43,-80.168056,26.024722,333
3,46,-80.129167,25.793611,2694
 3,47,-80.238611,25.811389,121
 1,49,-80.051667,26.711944,381
 4.50, -80, 160556, 25, 908611, 187
 4.52.-80.26.26.121667.456
 4,53,-80.105556,26.136389,501
 3,54,-80,383333,25,653056,81
 4,55,-80.249444,26.268333,314
 3.56, -80.294722, 25.703889, 184
 3,57,-80.315,25.808333.21
 3,58,-80.265278,25.788333,267
 4,60,-80.25,25.891667,205
 4,61,-80.090833,26.230278,147
 4,64,-80,211667,26,0175,595
```





M		PHONE CELL TE NAL STRENGTH		
MSNB	CELL	DEV	SSFVC	SSRVC
9412580201	TO17C	MDVC-1060	23	20
SSSTDRVC	BERFVC	BERRVC	RBERRVC	FERRVC
6	3	2	2	0
BQRVC	TDRVC	FREQERR	TIMEALIGN	MSPOW
6	3	1	0	2
NCELL T017A T017B T006B T016B T004A T005B T005A T018A T154B	NSSFFMC 5 23 17 13 29 33 23 21 21	MEASCHAN 1260 1272 1300 1305 1251 1302 1290 1294 1303	VIND Y Y Y Y Y Y Y Y Y	
TIMW 11:08:27 END	PRINTIN 0	ID	FCODE	
	EPHONE CEI	LL TRAFFIC RE	CORDING CAN	IDIDATE LIST FOR
MSNB	CELL	TIME	FCODE	URGENCY
941258020	1 TO17C	11:08:28		0
CANDCELL	CELL	TYPE	ntype	RATING
T005B	0		Std	0
END				

FIG.10

XTEL LOG FILE

```
DATE, TIME, LONGITUDE, LATITUDE, ALT, SPEED, HEADING, DPS_MODE, PHONE_TASK, TASK
 _DESC,CHAN,RSSI,MODTYPE,SLOT,CHANTYPE,SAT,DVCC.POWER.BER_BER_CODE.SBI.T
A, CELL1. DISTANCE1, CELL2, DISTANCE2, CELL3, DISTANCE3, LOWER_CTOA, UPPER_CTOA
COCHA_RSSI,MARKER,CHAN_GRP,EVENT,EVINFO,BAND,LISTTYPE,LISTCT,CHANT,RSS
11.CHANZ.RSS12.CHAN3.RSS13.CHAN4.RSS14.CHAN5.RSS15.CHAN6.RSS16.CHAN7.RS
SI7, CHAN8, RSSI8, CHAN9, RSSI9, CHAN10, RSSI10, CHAN11, RSSI11, CHAN12, RSSI12, C
HAN13,RSSI13,CHAN14,RSSI14,CHAN15,RSSI15,CHAN16,RSSI16,CHAN17,RSSI17,CH
AN18.RSSI18.CHAN19.RSSI19.CHAN20.RSSI20.CHAN21.RSSI21.CHAN22.RSSI22.CHA
N23, R$SI23, CHAN24, RSSI24, CHAN25, RSSI25, REVISION
7/30/99.11:08:27.
82.3321883,27.9813839,9,40.3,86.9,G8,5,Conversation,1218,-
93,D,3,V,3,5,2,0,87,3,0,0,,,,,,,14,15,-100,0,8,,,1,Neig,9,1284,-
89,1302,-93,1300,-103,1255,-107,1317,-109,1303,-109,1314,-111,1305,-
111,1315,
7/30/99,10:52:47.-
82.3321883,27.9813839,9,40.3,86.9,G8,5,Conversation,1218,-
93, D. 3, V. 3, 5, 2, 0.84, 3, 0, 0, , , , , , 14, 15, -100, 0, 8, , , 1, Neig, 9, 1284-
89, 1302, -93, 1300, -103, 1303, -107, 1255, -109, 1314, -111, 1317, -111, 1305, -
111.1315
//30/93,1032-40,-
82,332(1953,27.9813947,10,43.1,87.0,68,5,Conversation,1218,-
93,0,3,V,3,5,2,0.84,3,0,0,,,,,,-10,38,-137,0,8,,,1,Neig,9,1284-
89,1302,-93,1300,-103,1303,-107,1255,-109,1314,-111,1317,-111,1305,-
111,1315
7/30/99.10:52:48.-
82.3319553,27.9813947,10,43.1,87.0,G8,5,Conversation,1218,-
95, D. 3, V. 3, 5, 2, 0.84, 3, 0, 0, , , , , , –10, 38, –137, 0, 8, , 1, Neig, 9, 1284 –
83, 1302, –93, 1300, –101, 1303, –105, 1255, –109, 1305, –111, 1314, –113, 1315, –
113,1317,
82.3317164,27.9814044,10,44.7,87.2,G8,5,Conversation,1218,-
95,D,3,V,3,5,2,0.99,3,0,0,,,,,,-10,38,-137,08,,,1,Neig,9,1284-83,1302,-93,1300,-101,1303,-105,1255,-109,1305,-111,1314,-113,1315,-111,1317,-
```

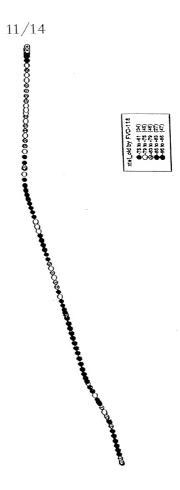


FIG.12

COMARCO FILE

13:20:00.8,26.677,-81.567 12:20:01.2,25.230,-81.456

13.21.00.3,28.655,-81.2128

FIG. 13A

Time, Long, Lat, Cell No, SS, 12:41:29.28.6559300.-18.205792000,1353,-124 12:41:29,28,6559300,-18.205792000,201,-106 12:41:29.28,6559300,-18.205792000,32,-106 12:41:29,28,6559300,-18.205792000,321,-76 12:41:29.28.6559300,-18.205792000.323,-66 12:41:29,28,6559300,-18.205792000,831,-100 12:41:30,28,6559260,-18.205580000,323,-66 12:41:31,28,6559170,-18.205380000,321,-75 12:41:31,28,6559170,-18.205380000,321,-75 12:41:31,28,6559170,-18.205380000.323,-64 12:41:32,28,6559080,-18.205198000,323,-63 12:41:33.28.6558950, -18.204922000.321, -73 12:41:33.28.6558950.-18.204922000,323,-62 12:41:34,28,6558900,-18.204769000,321,-73 12:41:34,28,6558900,-18.204769000,321.-73 12:41:34,28,6558900,-18.204769000,322,-98 12:41:34,28,6558900,-18.204769000,323,-61 12:41:35,28,6558900,-18.204577000,1353,-124 12:41:35.28.6558900.-18.204577000,201,-105 12:41:35,28,6558900,-18.204577000,202,-106 12:41:35,28,6558900,-18.204577000,32,-105 12:41:35.28.6558900,-18.204577000,323,-63 12:41:35.28.6558900.-18.204577000.831,-99 12:41:37,28,6558970,-18.204219000,321,-73 12:41:37,28,6558970,-18.204219000,323,-67 12:41:38,28,6559000,-18.204044000,321,-74 12:41:38,28,6559000,-18.204044000,323,-67 12:41:38,28,6559000,-18.204044000,321,-74 12:41:38,28,6559000,-18.204044000,323,-67 12:41:40.28.6559020.-18.203683000.1353,-122 12:41:40.28,6559020,-18.203683000,202,-104 12:41:40.28,6559020,-18.203683000,32,-105 12:41:40,28,6559020,-18.203683000,321,-73 12:41:40,28,6559020,-18.203683000,322,-96 12:41:40,28,6559020,-18.203683000,323,-67 12:41:41,28,6559070,-18.203457000,321,-72 12:41:41,28,6559070,-18.203457000,323,-66 12:41:42,28,6559100,-18.203125000,321,-71 12:41:42,28,6559100,-18.203125000,323,-66

13/14

v — Record # 1: — v 05/10/99 13:22:05 ALM INF 4103 7 32 G TC 457 Call Monitor: Call Record has been Written in RAM disk Ph#: (407) 9223002 Call clear by MS — mobile clear
Ph#: (407) 9223002 Call clear by MS - mobile clear v - v - Record # 2: - v - v 05/10/99 13:22:04 ALM INF 4113 7 32 G TC 457 Call Monitor: Call RSSI value (407) 9223002 cell 323 rrssi -77 ath 4 snr 40
Call Monitor: Call RSSI Value (407)9223002 cell 323 rrssi -77 athr 4 snr 40 v - Record # 3: - v 05/10/99 13:22:04 ALM INF 4117 7 32 G Call Monitor: Adj. cell RSSI values from Scanning Rcvr. (407)9223002 Cell_id RSSI:/323 / -73 v - Record # 264: v 05/10/99 13:21:00 ALM INF 4117 7 20 A Call Monitor: Adj. cell RSSI values from Scanning Rcvr. (407)9223002 Cell_id RSSI:/201 / -98
05/10/99 13:21:00 ALM INF 4117 7 20 A SRC Call Monitor: Adj. cell RSSI values from Scanning Rcvr. (407)9223002 Cell_id RSSI:/201 / -98 v
05/10/99 13:21:00 ALM INF 4117 7 32 B SRC Call Monitor: Adj. cell RSSI values from Scanning Rcvr.
Call Monitor: Adi. cell RSSI values from Scanning Royr.
05/10/99 13:21:00 ALM INF 4117 7 32 A SRC
05/10/99 13:21:00 ALM INF 4117 7 135 G SRC
05/10/99 13:21:00 ALM INF 4117 7 20 B SRC Call Monitor: Adi. cell RSSI values from Scanning Revr.
05/10/99 13:21:00 ALM INF 4113 7 32 G TC 457
(407) 9223002 cell 323 rrssi -72 attn 4 snr 40 v- Record # 271:
05/10/99 13:21:00 ALM INF 4117 7 3 B SRC Call Monitor: Adj. cell RSSI values from Scanning Rcvr. (407)9223002 Cell_id RSSI:/32 / -115



tce(9528_out by SS O ests -66 (603) • 4240 -45 (514) • 4040 -42 (405) • 105 to -40 (640) • 115 to -105 (452) • 127 to -116 (665)

FIG.15